Goal Two: Invest in Science, Technology, and University Outreach

Establish an aggressive and coordinated state agenda of investment in research and support for technology development, transfer, and University outreach while increasing the understanding among all North Carolinians of the importance of science and technology to the state's economic growth and prosperity.

Science and technology-based innovation fuels a knowledge-based economy; it creates new industries, makes existing ones globally competitive, and drives future economic growth. Over the coming decades, North Carolina can produce more new jobs for its citizens from the effective use of science and technology economic development policy than from any other source.

North Carolina is internationally recognized for a number of the visionary investments it has made in the past in support of its high-technology future. Increasingly, however, other states and nations are aggressively challenging North Carolina's science and technology leadership; continued directed action by the state is required to maintain its vanguard position in the innovation economy and produce the skilled workforce and jobs it must to remain competitive globally.

The recent findings of four highly regarded, national-level studies underscore this and paint a clear picture of North Carolina's science and technology resources, investments, and performance. Each of these analyses independently details North Carolina's strengths and weaknesses in the areas of science, technology, and university outreach.

1. The 2004 State Technology & Science Index, published by the Milken Institute, ranks North Carolina in the second tier of U.S. States in an assessment of their total technology and innovation capacity. Measured against seventy-five science and technology measures, North Carolina ranks twentieth overall. North Carolina ranked seventeenth in the 2002 index.

2. A similar pattern appears in the 2004 Science and Engineering Indicators report, published by the National Science Board of the Division of Science Resources Statistics of the National Science Foundation. The report presents state-by-state rankings across twenty-four science and technology indicators. Among the report's twenty-four indicators, North Carolina ranks in the first quartile on two, in the second or third quartile on twenty-one, and in the fourth quartile on one indicator.

3. In the 2004 State Science and Technology Indicators report, published by the Office of Technology Policy in the Executive Office of the President, North Carolina's performance ranks above the U.S. average on seven of the report's thirty-eight science and technology indicators; it ranks at or below the national average on the remaining thirty-one.

4. Tracking Innovation 2003, published by the North Carolina Board of Science and Technology, assesses North Carolina's performance on fifty-six measures. The report finds that, relative to the U.S. as a whole, North Carolina ranks above average on about half of the measures presented. Overall, among the seven comparison states featured in the study, North Carolina ranks sixth.

At the same time, the outstanding success of our state's investment in Biotechnology as an engine of prosperity and job creation has been validated by a number of other national and international studies, and it demonstrates clearly the returns possible from a deliberate and coordinated strategy of state investment in science and technology. Similar investments across a broad base of emerging technologies may be expected to achieve similar results.